

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
Assistant Secretary for Housing-Federal Housing Commissioner

TO: DIRECTORS, HOUSING DIVISION  
DIRECTORS, MULTIFAMILY DIVISION  
DIRECTORS, SINGLE FAMILY DIVISION

Series and Series Number:

(Supersedes issue dated  
June 8, 1994)

MATERIALS RELEASE NO. 1210b

ISSUE DATE: January 15, 1998

REVIEW DATE: January 15, 2001

SUBJECT: 1. Product TecLam and GP-Lam Laminated Veneer Lumber

2. Name and Address  
of Manufacturer

Louisiana-Pacific Corporation  
2706 Highway 421 North  
Wilmington, NC 28401

Data on the nonstandard product, described herein have been reviewed by the Department of Housing and Urban Development (HUD) and determination has been made that it is considered suitable from a technical standpoint for the use indicated herein. This Release does not purport to establish a comparative quality or value rating for this product as compared to standard products normally used in the same manner.

This Materials Release cannot be used as an indication of endorsement, or approval by HUD of the described product, and any statement or representation, however made, indicating such approval or endorsement by HUD is unauthorized. See Code 18, U.S.C. 709.

Any reproduction of this Release must be in its entirety.

USE: General framing lumber.

DESCRIPTION:

The laminated veneer lumber (LVL) manufactured by Louisiana-Pacific Corporation is labeled TecLam. The product is labeled GP-Lam when it is distributed by the Georgia-Pacific Corporation (GP). Louisiana-Pacific retains responsibility for the performance of the LVL whether labeled TecLam or GP-Lam. Product field problems are to be referred to the distributor of the product who will relay the problem to Louisiana-Pacific.

TecLam and GP-Lam laminated veneer lumber (LVL) are manufactured by laminating Douglas Fir veneers with the grain parallel to the length of the lumber. The veneers are joined end-to-end with a scarf or lap joint. The veneers are coated on one side with a phenol formaldehyde adhesive, assembled into the desired lay-up pattern, and fed into a pre-press. The lay-up is then transferred to a hot press where it is compressed to the required thickness and the glue is cured under heat and pressure.

The products are available in thicknesses from 3/4" to 2", widths from 1-3/4" to 48", and lengths up to 50'.

The laminated veneer lumber is intended for dry service conditions where the maximum moisture content of the wood will not exceed 19 percent. The fire resistance of TecLam laminated veneer lumber may be considered to be that of similar sizes of sawn lumber.

#### REQUIREMENTS:

##### General

TecLam and GP-Lam laminated veneer lumber shall be manufactured to meet the requirements of the Mill Product Specifications and the Quality Control Manual on file with HUD. The quality control test records shall be made available for inspection by HUD upon request.

##### Veneer:

Each sheet of veneer shall be tested with an sub-ultrasonic veneer tester and graded to meet the Mill Product Specifications.

##### Glue Bond

The glue bond shall meet the requirements of ASTM D 2559, Specification for Adhesives for Structural Laminated Wood Products for Exterior (Wet) Exposure Conditions.

##### Moisture Content

The maximum moisture content at delivery shall be 12 percent.

#### DESIGN AND ALLOWABLE STRESSES:

The customary design practices for sawn lumber are applicable to TecLam and GP-Lam laminated veneer lumber. Design shall be in accordance with the National Design Specification for Wood Construction (NDS), unless modified by this Materials Release (MR). The allowable design stresses shall be in accordance with Table 1.

Table 1

ALLOWABLE DESIGN STRESSES  
(Pounds per square inch)

Grade	Edge Bending stress F(p) *	Tension Parallel to grain F(t)	Compression Parallel to grain F(c)	COMPRESSION PERPENDICULAR TO GRAIN F(c)		HORIZONTAL SHEAR F(v)		Modulus of Elasticity E
				Perpendicular to glue line (Joist)	Perpendicular to glue line (Plank)	Perpendicular to glue line (Joist)	Parallel to glue line (Plank)	
2.2E	3,200	2,050	2,950	750	650	285	190	2,200,000
2.0E	2,850	1,850	2,800	750	650	285	190	2,000,000
1.8E	2,250	1,600	2,300	750	650	285	190	1,800,000

\*For 12-inch depth. For other depths, multiply by the factors below or (12/d) 1/9.  
For depths less than 3.5 inches, use the factor for 3.5 inch depth.

Depth (inches) 3.50 5.50 7.25 9.25 11.25 12.00 14.00 16.00 18.00  
1.15 1.09 1.06 1.03 1.01 1.00 0.98 0.97 0.96

INSTALLATION:

Installation shall be in accordance with the HUD Minimum Property Standards for sawn lumber construction with the following modifications:

1. The allowable lateral nail resistance values shall be in accordance with the NDS recommendations for Douglas Fir sawn lumber.
2. Nails installed parallel to the glue lines, in the narrow face of the lumber, shall be spaced no closer than 3" o.c. for 8d common nails and 4" o.c. for 10d or 12d common nails; 16d common nails installed parallel to the glue line in the narrow face of the lumber at least 1 1/2" thick and 3 1/2" wide may be spaced no closer than 8" o.c.
3. Bolt design values and minimum spacing for bolts installed perpendicular to the glue line shall be in accordance with the NDS for Douglas Fir dense grade sawn lumber.

QUALITY ASSURANCE CERTIFICATION:

Louisiana-Pacific Corporation shall certify that the TecLam and GP-Lam LVL conform to the requirements of this MR. PFS Corporation shall validate the manufacturer's certification that TecLam and GP-Lam LVL2 meet the requirements of this MR.

Each piece of lumber certified as conforming to this MR shall be marked with the following information:

1. Louisiana-Pacific Corporation.
2. TecLam or GP-Lam.
3. The registered PFS validation mark.
4. MR No. 1210b.
5. Species and grade.
6. Code number representing the date of manufacture.
7. Plant number.

SAMPLE STAMPS\*




TecLam™



Manufactured  
in  
Oregon, U.S.A.

GP-LAM



ICBO	4497	 2.0E
SBCC	9493A	
BOCA	92-17	
NYC	464-89-SM	

CCMC #	11936-R
HUD MR	1210b

WARRANTY:

Louisiana-Pacific Corporation warrants TecLam and GP-Lam laminated veneer lumber against any defects due to faulty material and workmanship in the manufacturing process for a period of twenty (20) years from the date of installation.

The liability of Louisiana-Pacific Corporation on the warranty shall be limited to replacement of any defective members and the cost of installation; or at the option of Louisiana-Pacific Corporation, payment in lieu thereof.

This warranty applies to any material failure due to manufacture only and does not cover, nor will the manufacturer be liable for, any defects or damages due to misuse, improper installation or damages resulting from fire, lightning or other unforeseen causes beyond the manufacturer's control.

The manufacturer's warranty does not relieve the builder, in any way, of responsibility under the terms of the Builder's Warranty required by the National Housing Act, or under any provisions applicable to any other housing program. A copy of the manufacturer's warranty shall be furnished by the builder to the owner.

#### MANUFACTURER'S RESPONSIBILITIES:

Issuance of this MR commits the manufacturer to fulfill, as a minimum, the following:

1. Produce, label and certify the material, product or system in strict accordance with the terms of this MR.
2. Provide necessary corrective action in a timely manner for all cases of justified complaint, poor performance or failure reported by HUD.
3. When requested, provide the Office of Consumer and Regulatory Affairs, Manufactured Housing and Standards Division, HUD Headquarters, with a representative list of properties in which the material, product or system has been used, including complete addresses or descriptions of locations and dates of installation.
4. Inform HUD in advance of changes in production facilities, methods, design of the product, company name, ownership or mailing address.

#### EVALUATION:

This MR shall be valid for a period of three years from the date of initial issuance or most recent renewal or revision, whichever is later. The holder of this MR shall apply for a renewal or revision 90 days prior to the Review Date printed on this MR. Submittals for renewal or revision shall be sent to HUD Headquarters. Appropriate Use Fee shall be sent to:

U.S. Department of Housing and Urban Development  
Technical Suitability of Products Fees  
P.O. Box 954199  
St. Louis, MO 63195-4199

The holder of this MR may apply for revision at any time prior to the Review Date. Minor revisions may be in the form of a supplement to the MR.

If the Department determines that a proposed renewal or supplement constitutes a revision, the appropriate User Fee for a revision will need to be submitted in accordance with Code of Federal Regulations 24 CFR 200.934, "User Fee System for the Technical Suitability of Products Program," and current User Fee Schedule.

CANCELLATION:

Failure to apply for a renewal or revision shall constitute a basis for cancellation of this MR. HUD will notify the manufacturer that the MR may be canceled when:

1. conditions under which the document was issued have changed so as to affect production of, or to compromise the integrity of the accepted material, product or system,
2. the manufacturer has changed its organization form without notifying HUD, or
3. the manufacturer has not complied with responsibilities it assumed as a condition of HUD's acceptance.

However, before cancellation, HUD will give the manufacturer a written notice of the specific reasons for cancellation, and the opportunity to present views on why the MR should not be canceled. No refund of fees will be made on a canceled document.

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This Materials Release is issued solely for the captioned firm  
and is not transferable to any person or successor entity.  
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